

APPROVED	O.G. FIG.	
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Applicant(s): Takuya Tamatani et al.

ANTIBODIES SPECIFIC FOR A CELL SURFACE MOLECULE
MEDIATING CELL ADHESION AND SIGNAL TRANSMISSION,
CELLS SECRETING SUCH ANTIBODIES, AND METHODS OF
MAKING AND USING SUCH ANTIBODIES

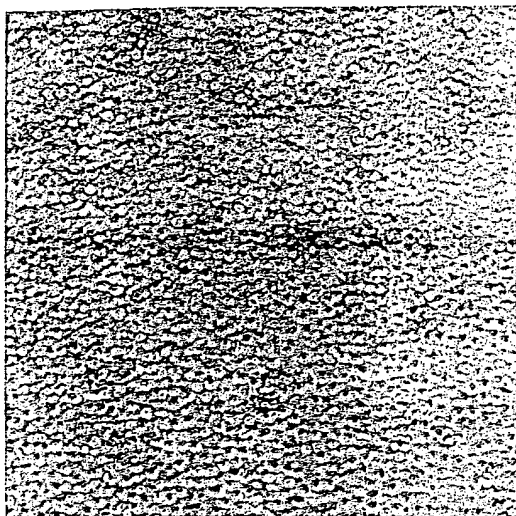


FIG. 1A

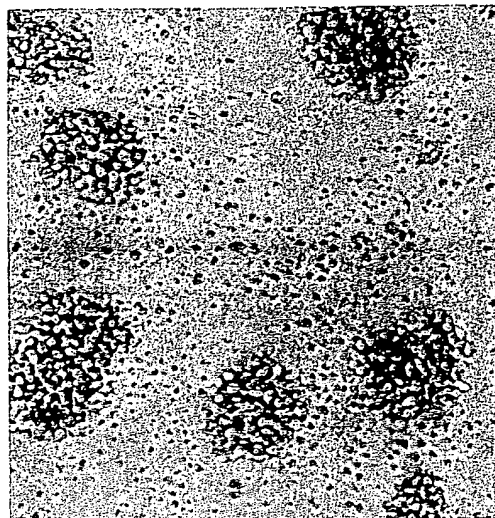


FIG. 1B

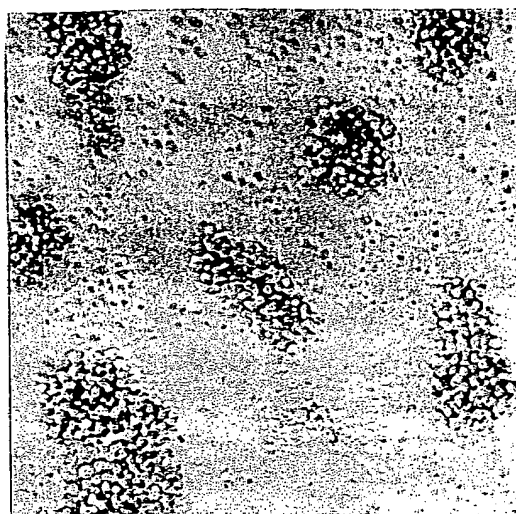


FIG. 1C

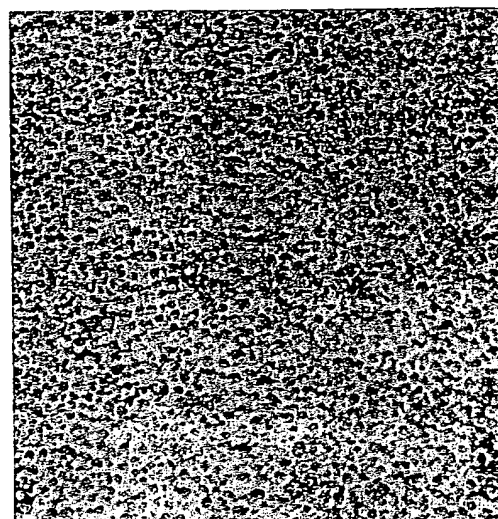
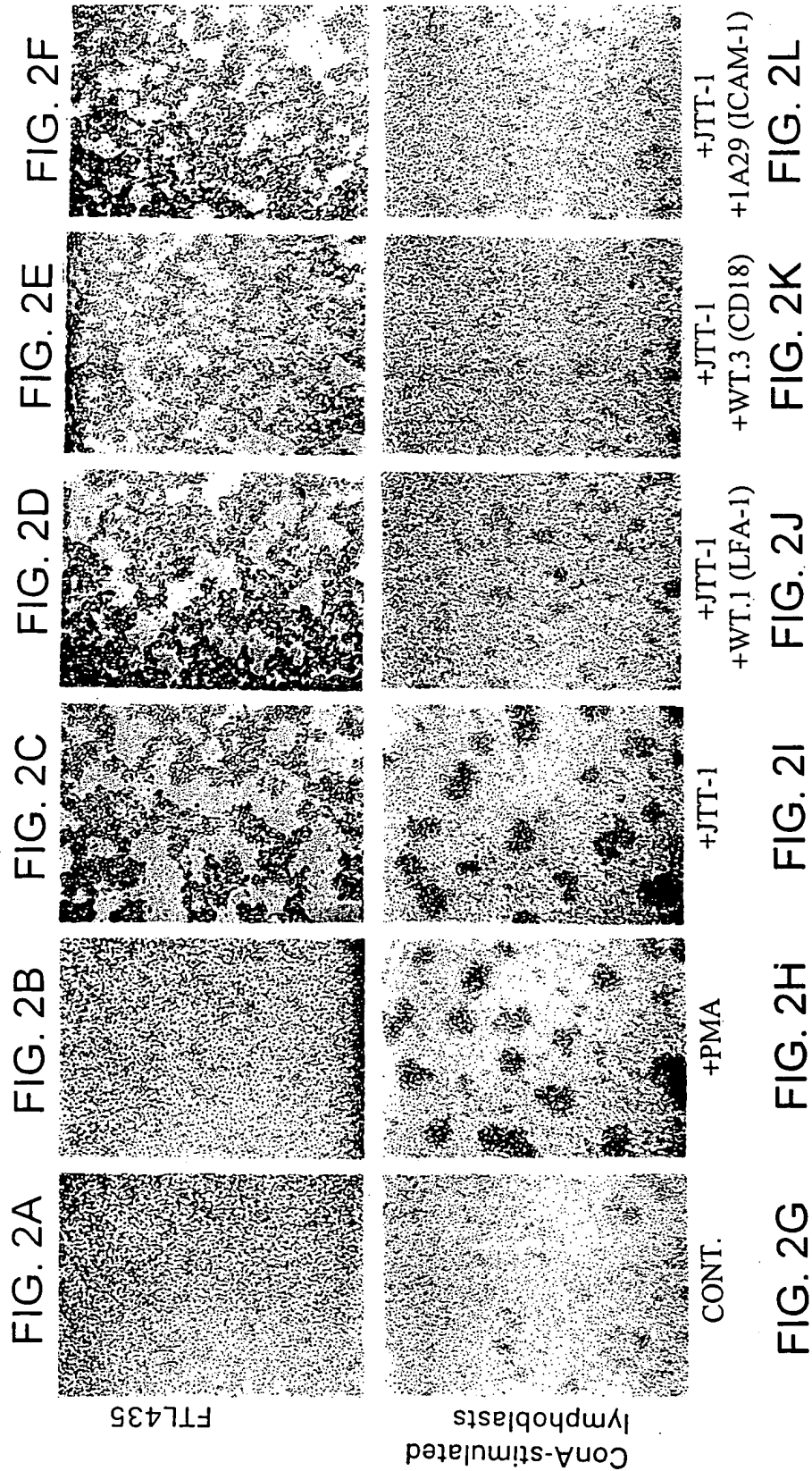


FIG. 1D



APPROVED	D.G. FIG.	
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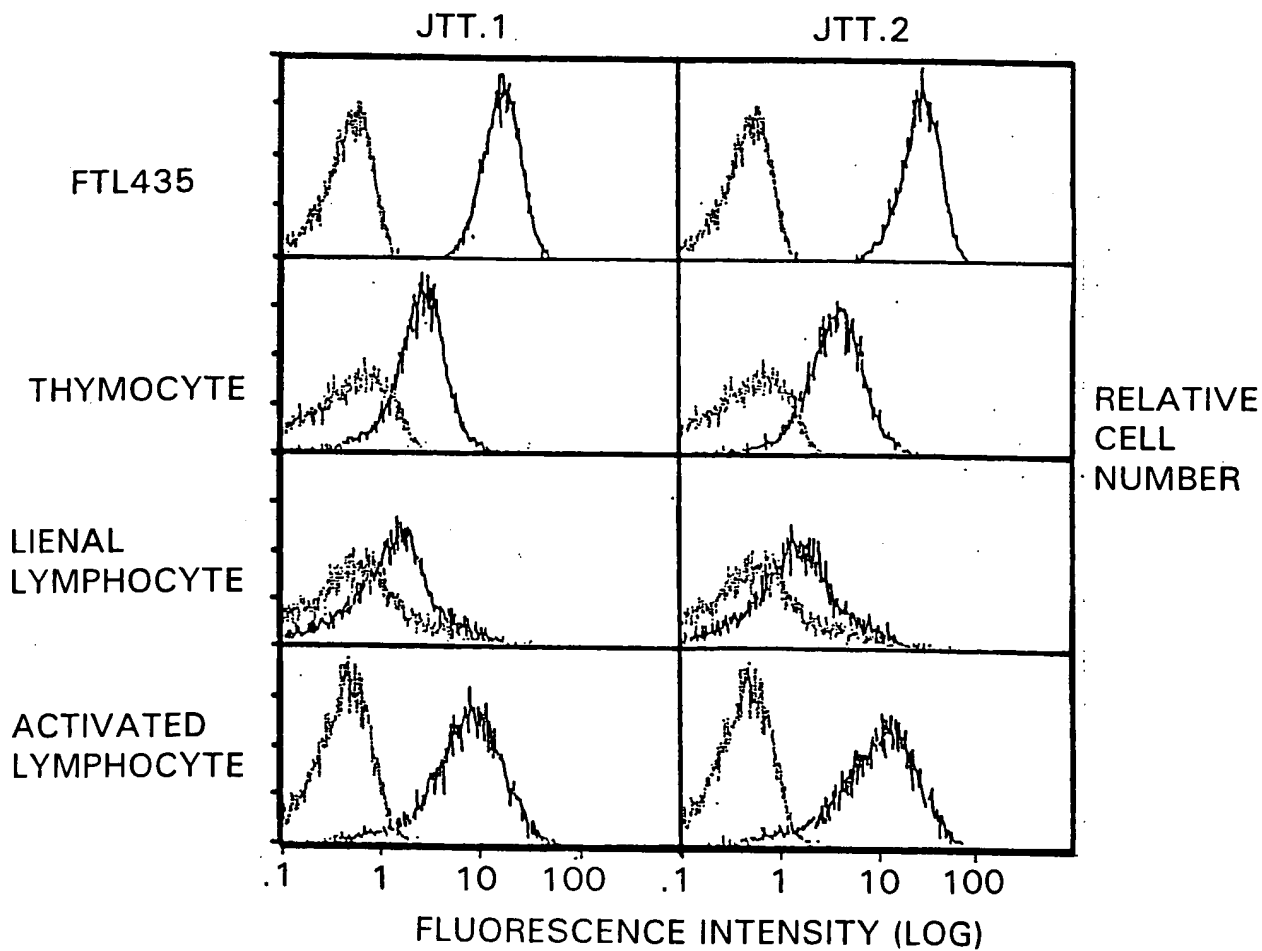
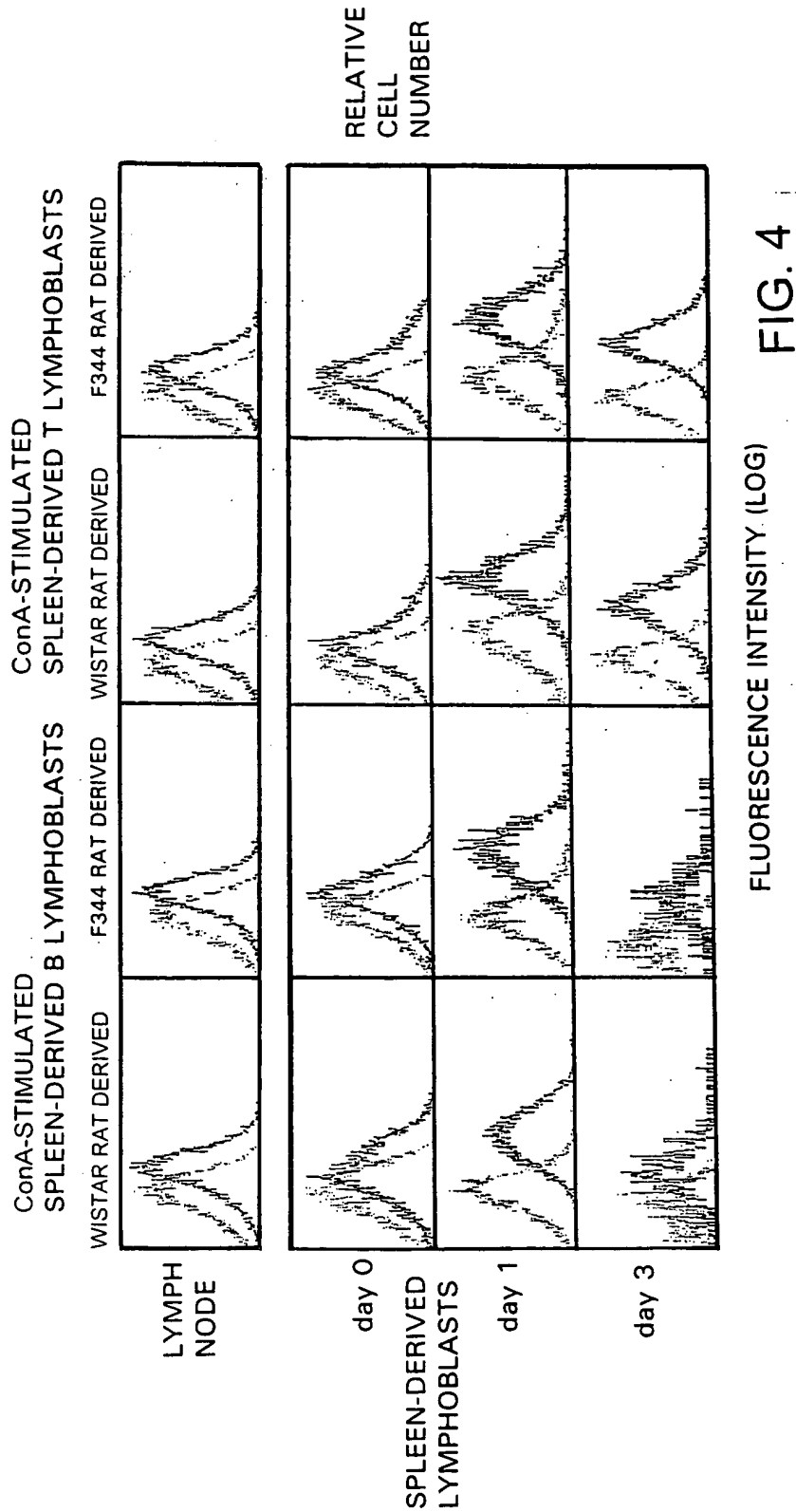


FIG. 3

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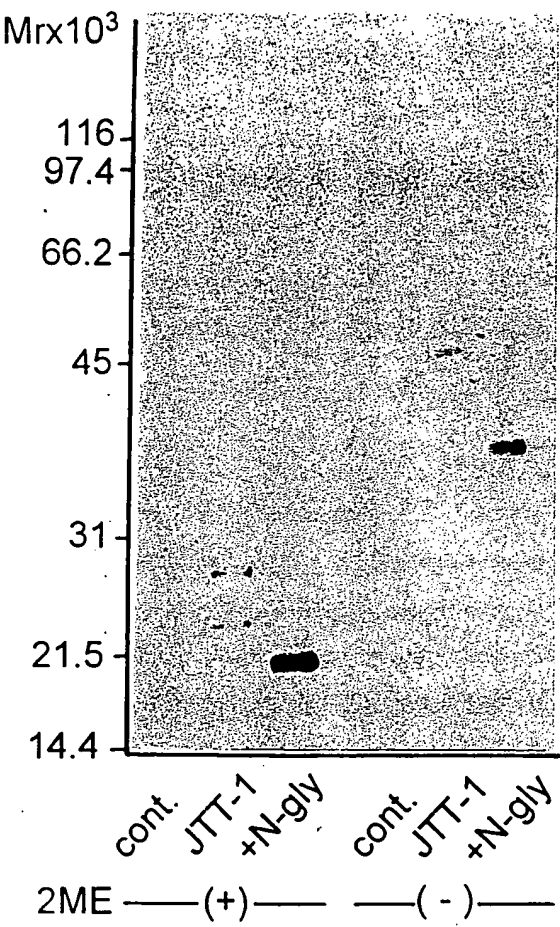


FIG. 5

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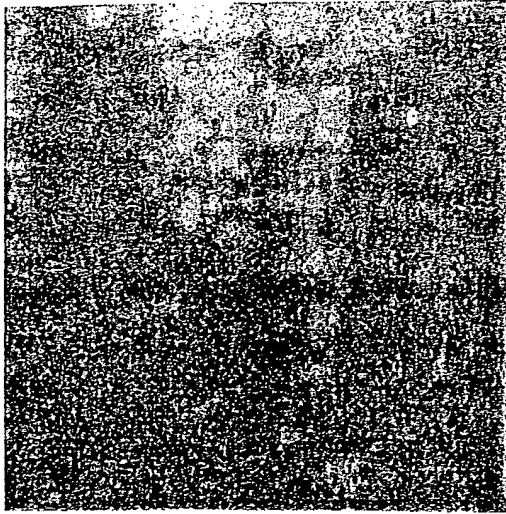


FIG. 6A

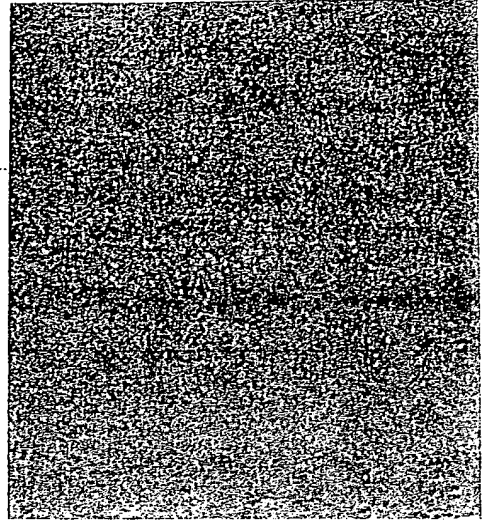


FIG. 6B

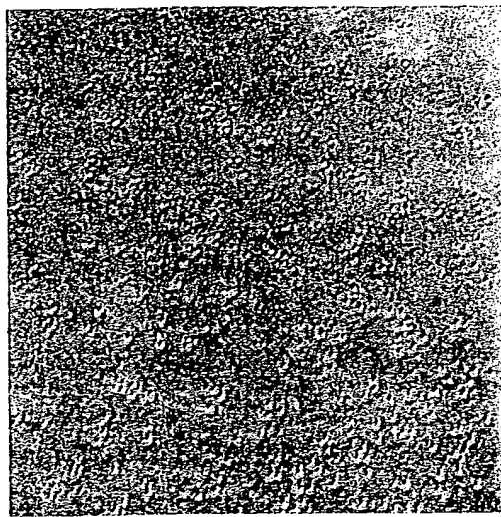


FIG. 6C

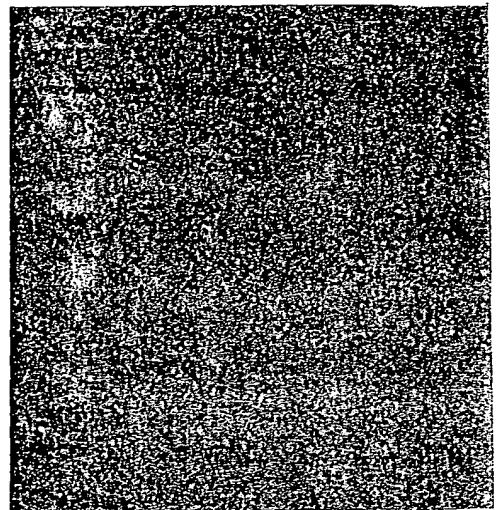


FIG. 6D

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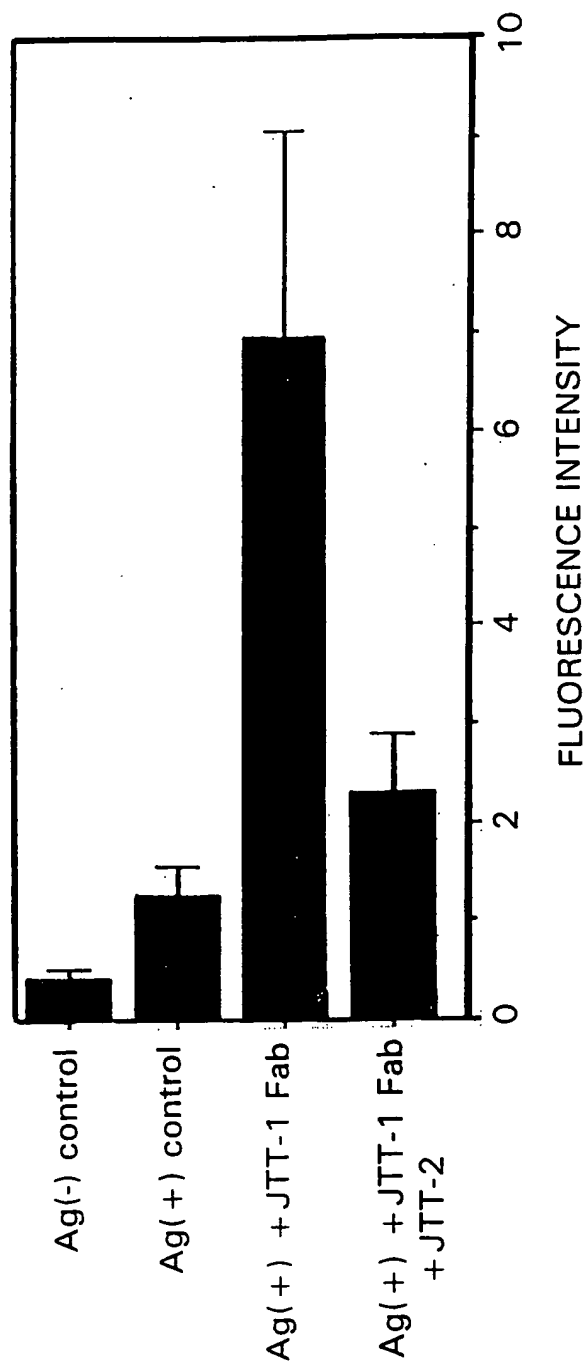


FIG. 7

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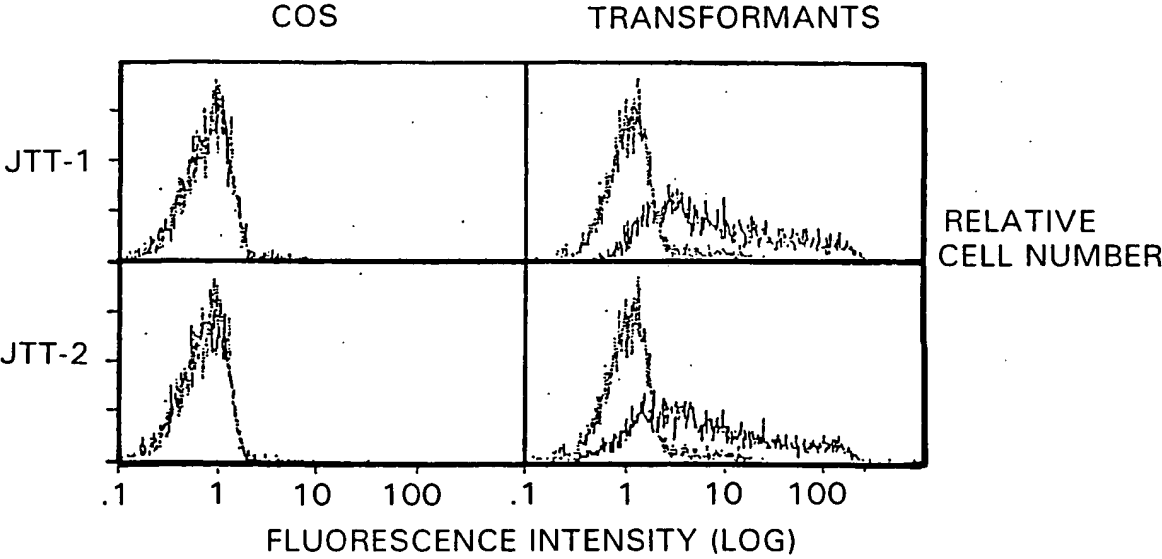


FIG. 8

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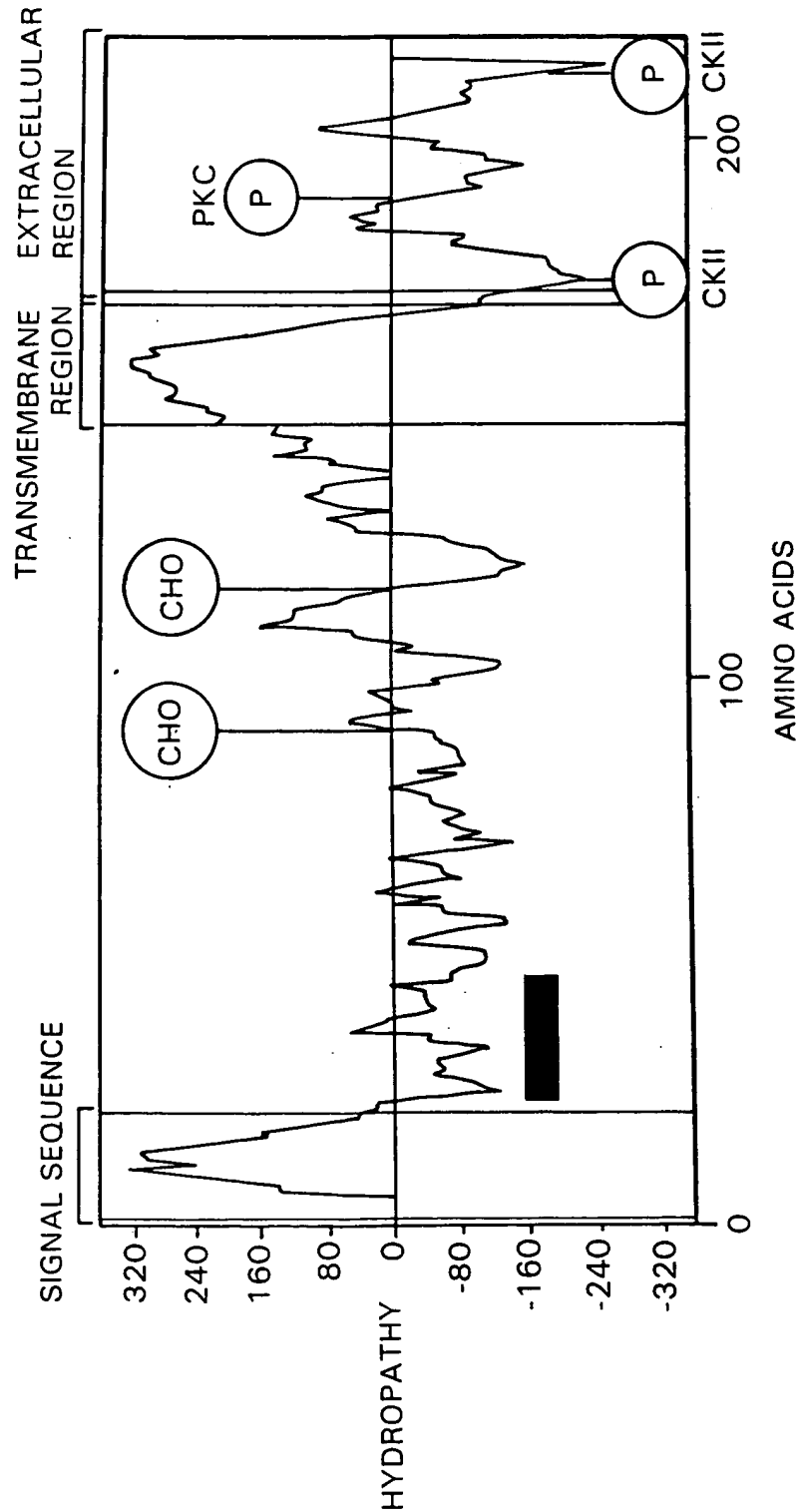


FIG. 9

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human	50	VQQ	I	YPP	CC	GGV	QI	HN	FS	MY	AN	GS	IN	EL	LT	KV	IR	FL	FC	FW	YF	SG	MP	MS
rat	50	VQQ	ET	PP	SC	GGV	QI	HN	FS	MY	AN	GS	IN	EL	LT	KV	IR	FL	FC	FW	YF	SG	MP	MS
mouse	50	VQQ	ET	PP	SC	GGV	QI	HN	FS	MY	AN	GS	IN	EL	LT	KV	IR	FL	FC	FW	YF	SG	MP	MS
consensus	50	VQQ	ET	PP	SC	GGV	QI	HN	FS	MY	AN	GS	IN	EL	LT	KV	IR	FL	FC	FW	YF	SG	MP	MS
human	100	ND	YNN	FFL	SV	LS	NN	HS	CP	MS	VS	IS	SG	SG	TK	LT	DD	LC	LV	KG	GG	Q	Q	Q
rat	100	ND	YNN	FFL	SV	LS	NN	HS	CP	MS	VS	IS	SG	SG	TK	LT	DD	LC	LV	KG	GG	Q	Q	Q
mouse	100	ND	YNN	FFL	SV	LS	NN	HS	CP	MS	VS	IS	SG	SG	TK	LT	DD	LC	LV	KG	GG	Q	Q	Q
consensus	100	ND	YNN	FFL	SV	LS	NN	HS	CP	MS	VS	IS	SG	SG	TK	LT	DD	LC	LV	KG	GG	Q	Q	Q
human	149	CAA	IG	WLP	KP	LC	CC	ES	YS	YH	TS	GG	VT	PK	PP	DP	IF	LS	SH	YF	GS	Q	Q	Q
rat	150	CAA	IG	WLP	KP	LC	CC	ES	YS	YH	TS	GG	VT	PK	PP	DP	IF	LS	SH	YF	GS	Q	Q	Q
mouse	150	CAA	IG	WLP	KP	LC	CC	ES	YS	YH	TS	GG	VT	PK	PP	DP	IF	LS	SH	YF	GS	Q	Q	Q
consensus	150	CAA	IG	WLP	KP	LC	CC	ES	YS	YH	TS	GG	VT	PK	PP	DP	IF	LS	SH	YF	GS	Q	Q	Q
human	199	VT	DT	RL	KS	AV	NT	FM	YM	EE	PP	SS	SS	KK	KK	TT	IC	FI	FA	VC	GL	V	V	V
rat	200	VT	DT	RL	KS	AV	NT	FM	YM	EE	PP	SS	SS	KK	KK	TT	IC	FI	FA	VC	GL	V	V	V
mouse	200	VT	DT	RL	KS	AV	NT	FM	YM	EE	PP	SS	SS	KK	KK	TT	IC	FI	FA	VC	GL	V	V	V
consensus	200	VT	DT	RL	KS	AV	NT	FM	YM	EE	PP	SS	SS	KK	KK	TT	IC	FI	FA	VC	GL	V	V	V
human	199	VT	DT	RL	KS	AV	NT	FM	YM	EE	PP	SS	SS	KK	KK	TT	IC	FI	FA	VC	GL	V	V	V
rat	200	VT	DT	RL	KS	AV	NT	FM	YM	EE	PP	SS	SS	KK	KK	TT	IC	FI	FA	VC	GL	V	V	V
mouse	216	VT	DT	RL	KS	AV	NT	FM	YM	EE	PP	SS	SS	KK	KK	TT	IC	FI	FA	VC	GL	V	V	V
consensus	216	VT	DT	RL	KS	AV	NT	FM	YM	EE	PP	SS	SS	KK	KK	TT	IC	FI	FA	VC	GL	V	V	V

FIG. 10

JTT1	M - - - - - K S G L - - - W - Y F F L F C L R I K V L T G E I N G S A N Y E M F I F H 34
CD28	- - L - - - - R L L L A - - - - L N L F - P S I Q V T G N K I L V K Q S P M L V A Y D 33
CTLA4	M A C L G F Q R H K A Q L N L A A R T W P C T L L F F L L F I P V F C K A M H V A Q P A V L A S S 50
consensus	M - - L - - - - . L . L A - - - W - . L . L F . L . I . V A A . . 50
JTT1	N G G V Q I L [C] K K Y [Y] - - P D I V Q Q F K M Q L L K G G Q I L - - - [C] D L T K T K G S G N T V S I K 78
CD28	N A V - N L S C K K Y [Y] S Y N L F S R E F R A S L H K G L D S A V E V - C V V Y G N Y S Q Q L Q V Y S K 81
CTLA4	R G I A S F V C E Y [Y] A S P G K A T E V R V T V L R Q A D S Q V T E V C A A - - T Y M T G N E L T F L 98
consensus	N G [C] K K Y [Y] . . P E F R . . L L K G . D S . V . . - [C] T Y . . G N . V . . K 100
JTT1	S L K F [C] H S Q L S N N S V [V] F F L Y N L D H S H A N Y Y F F [C] N L S I F D D P P P F - - K V T L T G G 126
CD28	T G F N C D G K L G N E S V T F Y L Q N L Y V N Q T D I Y F F C K I E V M Y P P P Y L D N E K S N G T 131
CTLA4	D D S I C T G T S S G N Q V N L T I Q G L R A M D T G L Y I C K V E L M Y P P P Y Y - L G I G N G T 147
consensus [C] . G . L S N N S V . F . L Q N L T . . Y F [C] K . E . M Y P P P Y N G T 150
JTT1	Y L H I Y E S Q L [C] C Q L K F - - - - - [W-] P I G C A A F V V V C I [L] G C - I L I C W L T K K 167
CD28	I I H V K G K H L C P S P L F P G P S K P F W V L V V G G V L A C Y S L L V T V A F I I F W V R S 181
CTLA4	Q I Y V I D P E P C P D S D F - - - - - L L W I L A A V S S G L F F Y S F L L T - A V S L S K M L K 191
consensus	. I H V L C [P] [F] [W.] [L.] [L.] [T] I K 200
JTT1	K Y [S] S S V H D P N G E Y M F M R A V N T A K K S R - - - - - L T D V T L - - - 199
CD28	K R S - - - R L L H S D Y M N M T P R R P G P T R K H Y Q P Y A P P R D F A A Y R S 220
CTLA4	K R S - - - P L T T G V Y V K M P P T E P E - C E K Q F Q P Y - - - - - F I P I N - 223
consensus	K R S - - - . L . : G . Y M . M . P . . P K . . Q P Y - - . . D F - 242

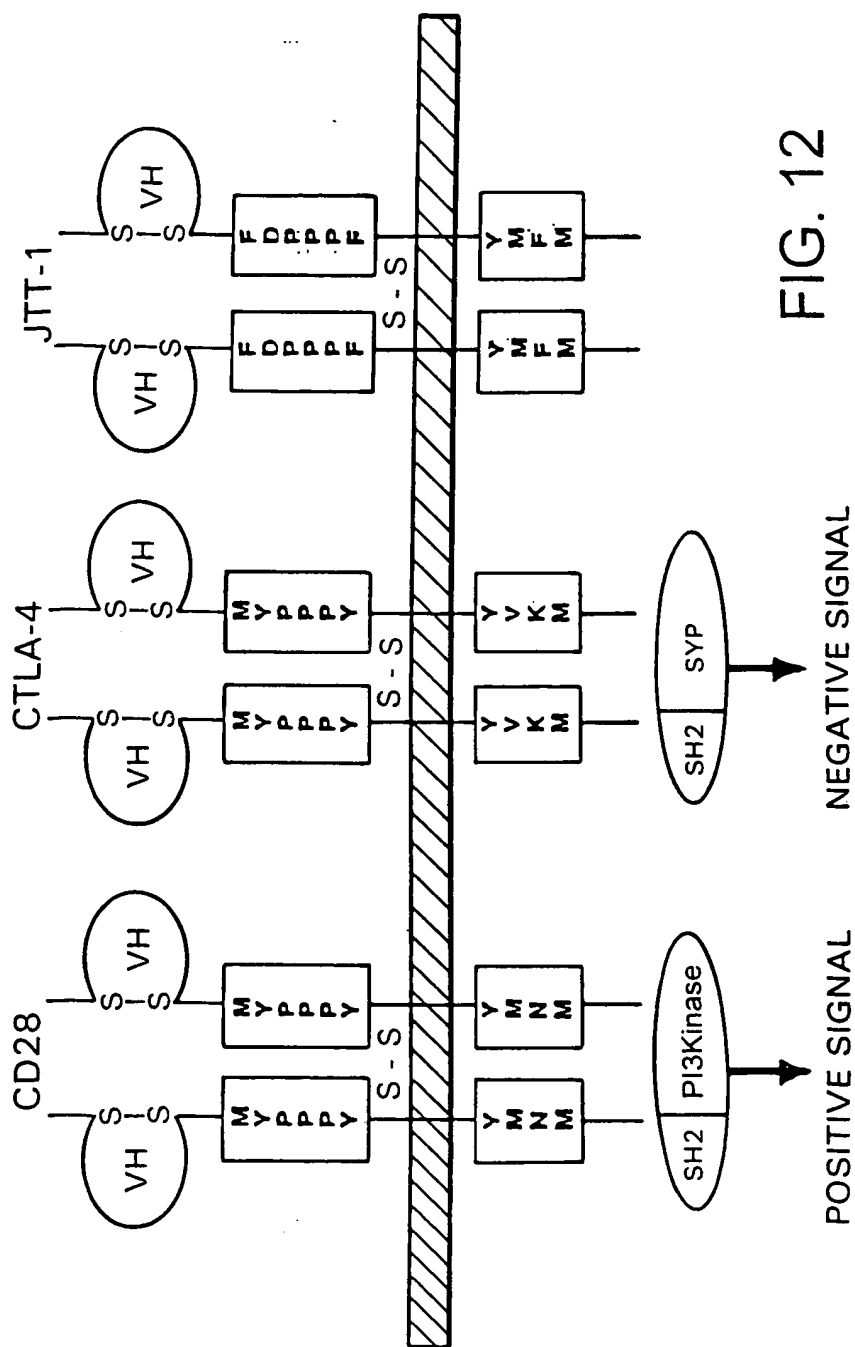
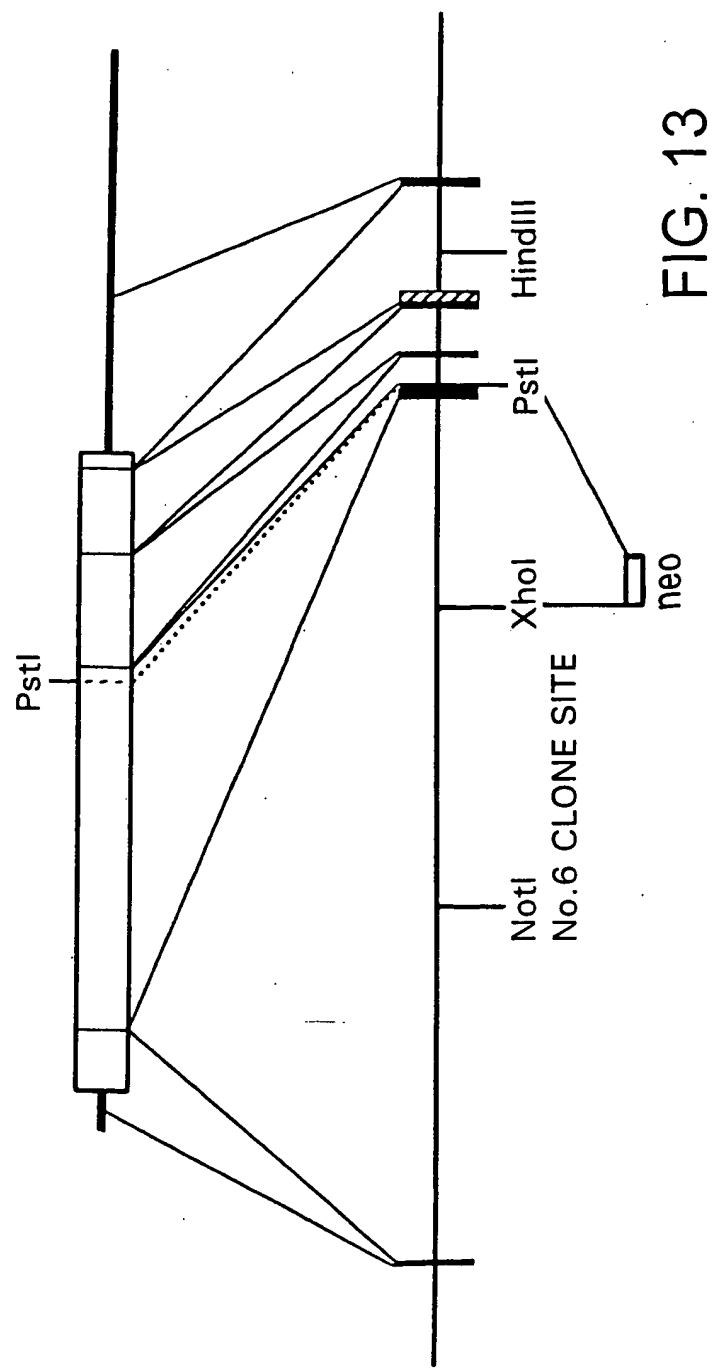


FIG. 12

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APPROVED	O.G. FIG.	
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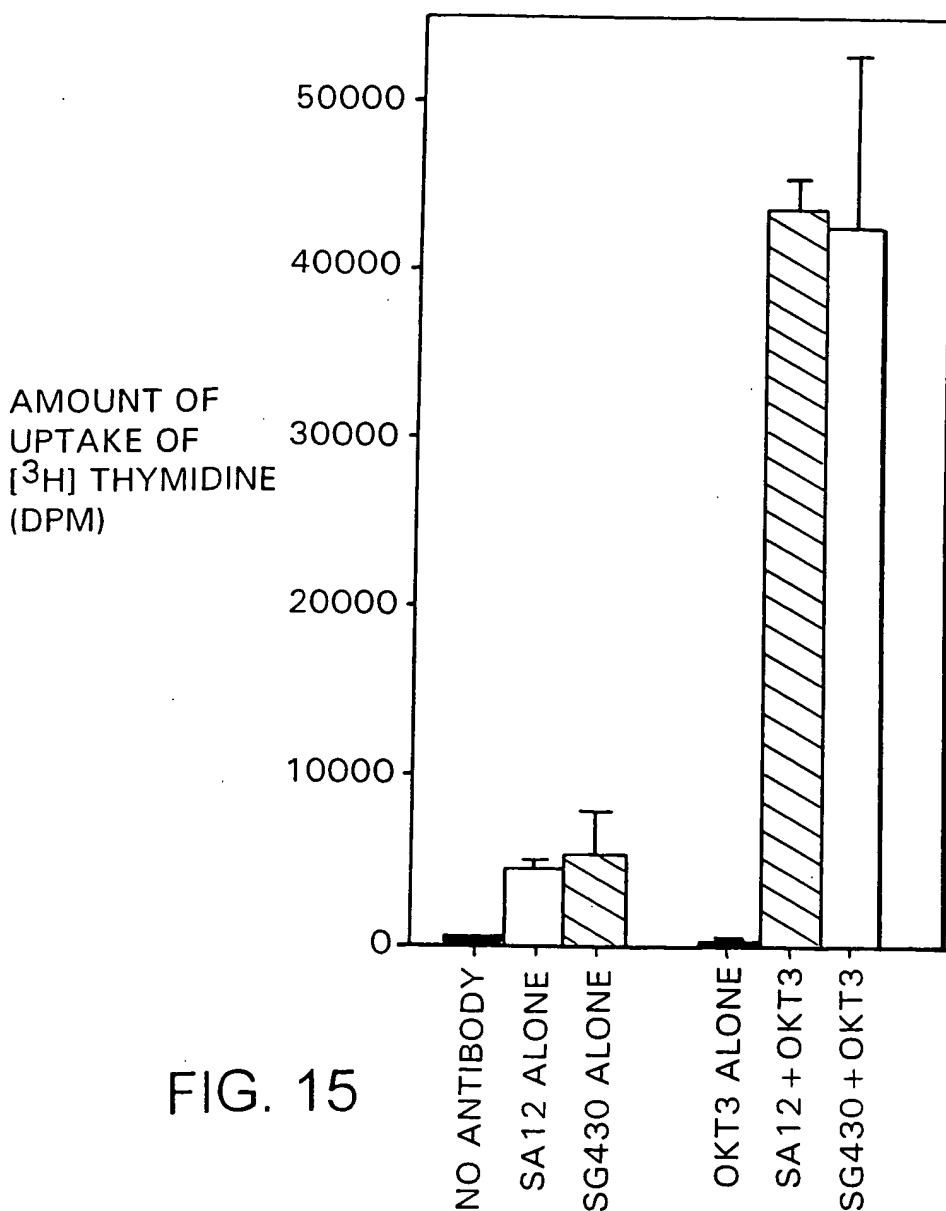
ANTIBODY SPECIFIC FOR A CELL SURFACE MOLECULE
MEDIATING CELL ADHESION AND SIGNAL TRANSMISSION,
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rat	50	
rat mutant	50	
consensus	50	
rat	100	
rat mutant	100	
consensus	100	
rat	150	
rat mutant	150	
consensus	150	
rat	200	
rat mutant	200	
consensus	200	
rat	200	
rat mutant	216	
consensus	216	

FIG. 14

APPROVED	O.G. FIG.	
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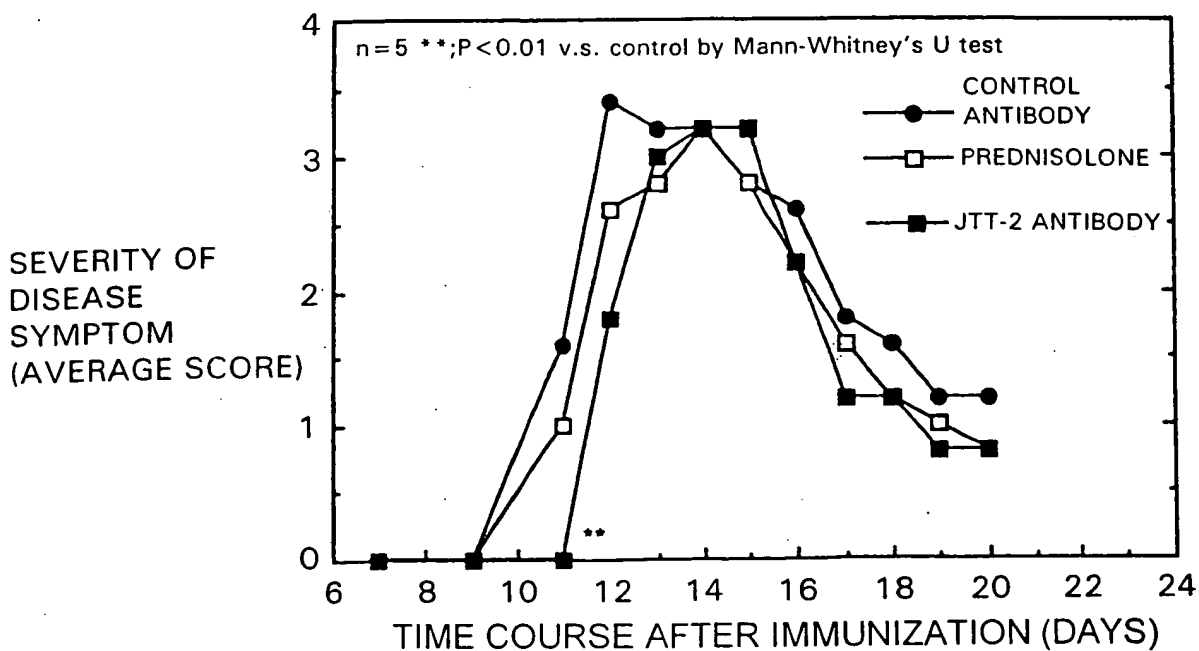


FIG. 16

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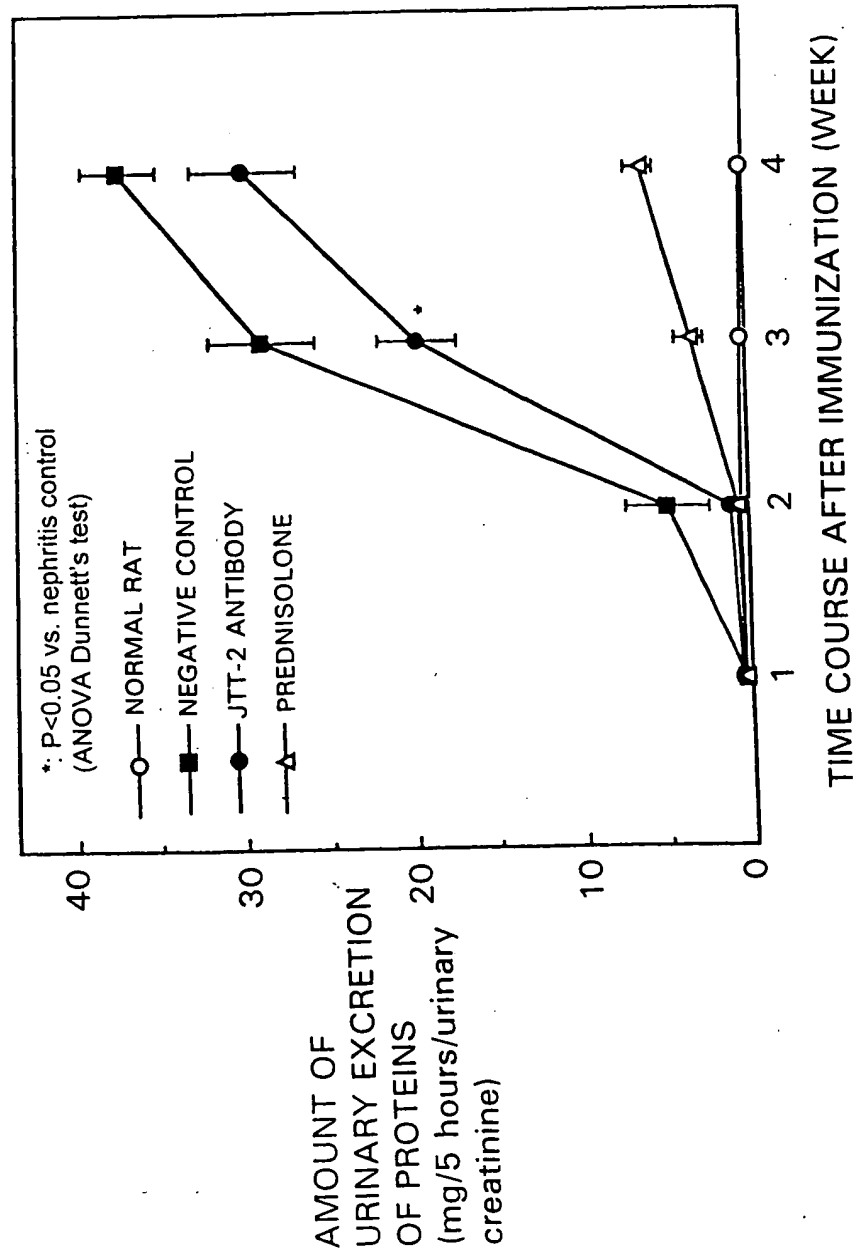


FIG. 17

APPROVED	O.G. FIG.	
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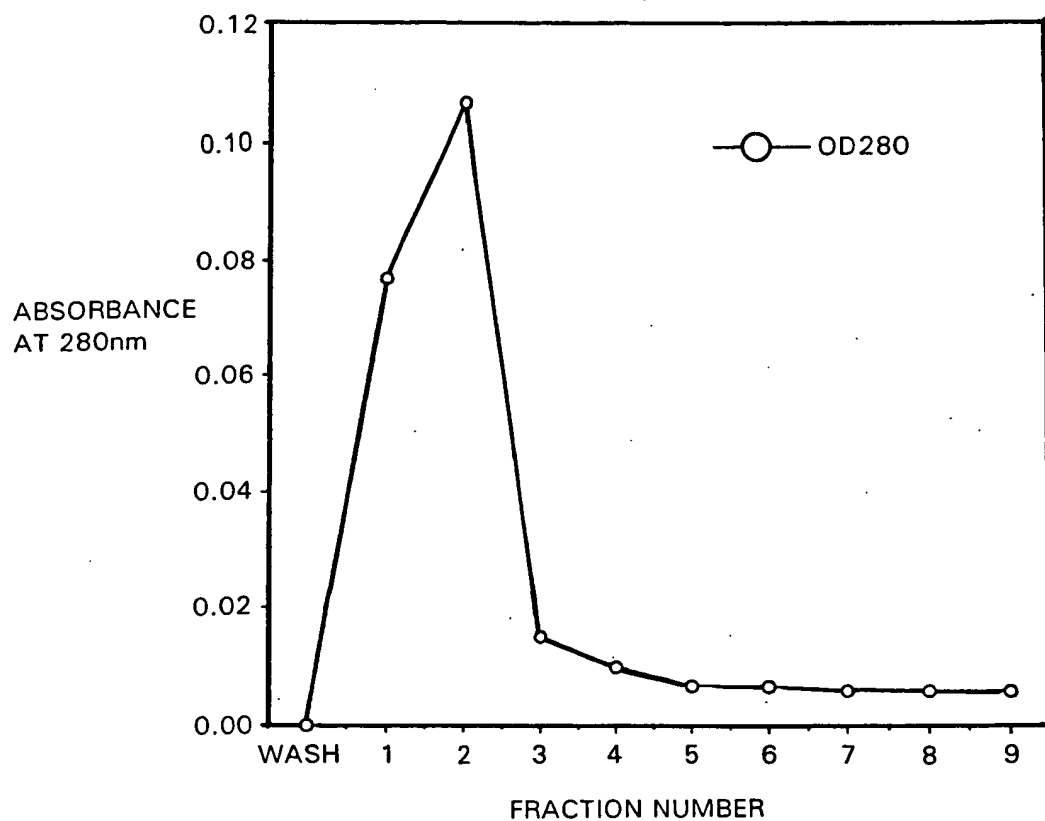


FIG. 18

APPROVED	O.G. FIG.	
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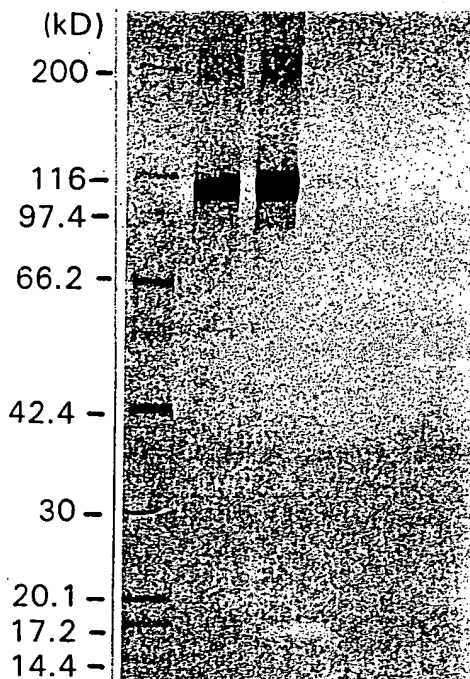


FIG. 19

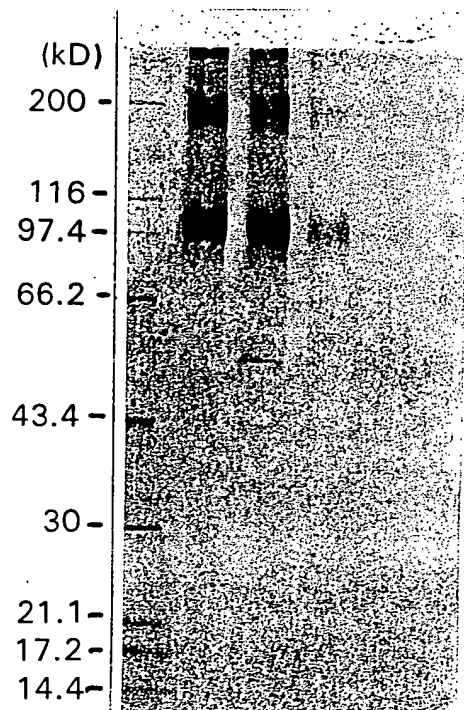


FIG. 21

APPROVED	O.G. FIG.	
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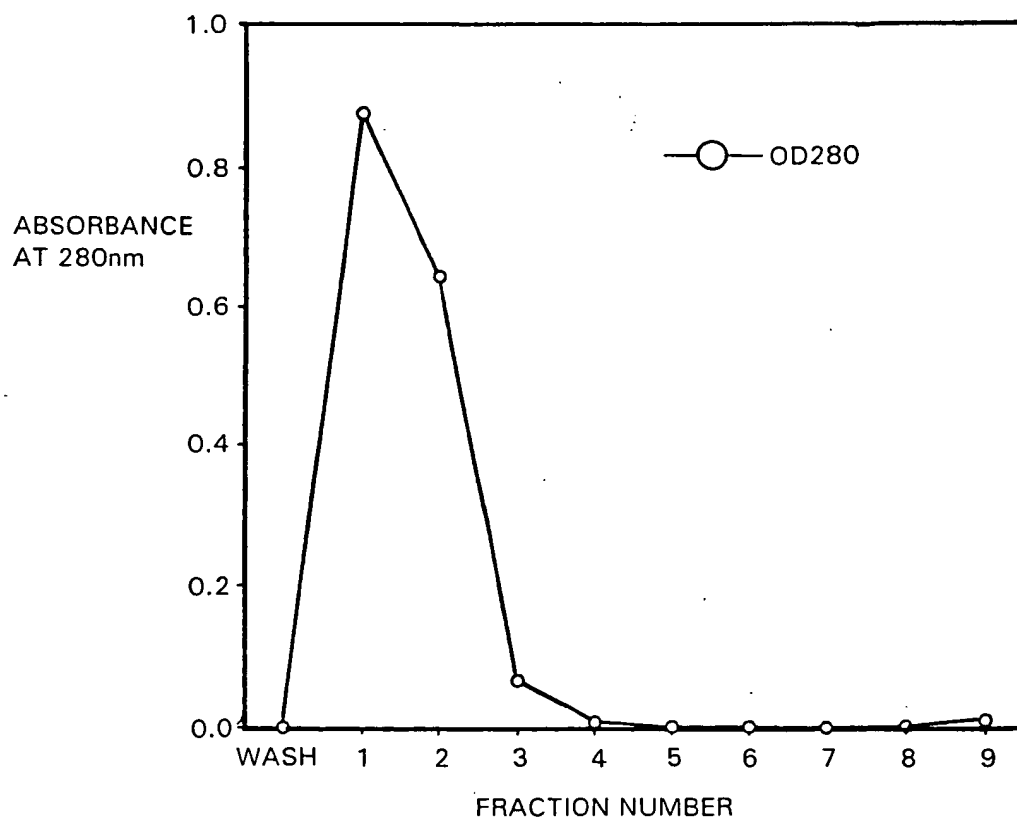


FIG. 20

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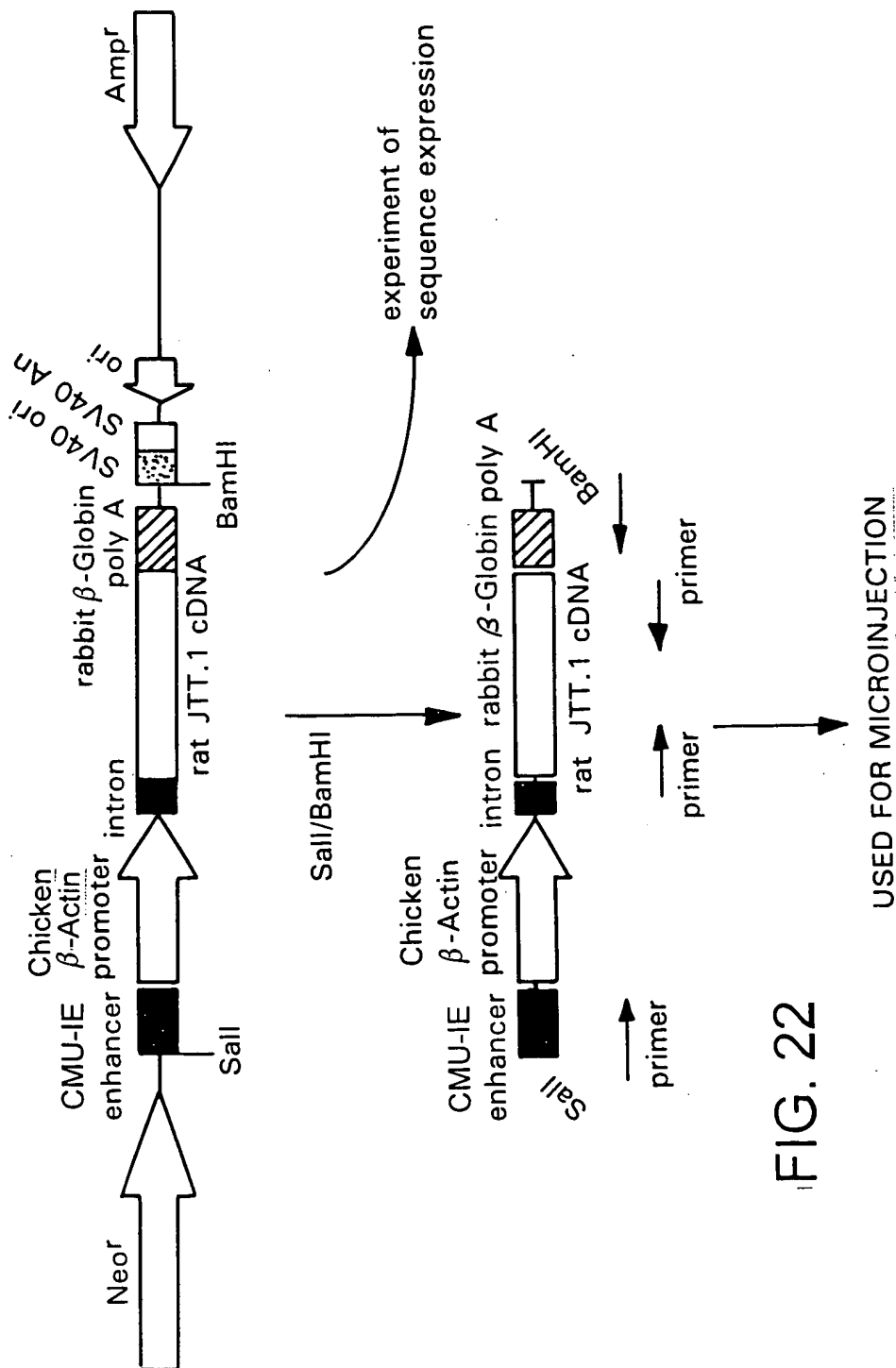


FIG. 22